



WORKMAN & ASSOCIATES

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Spring 1984 Catalog

1 Workman and Associates Spring 1984 Catalog

The File Transporter

Requirements: CP/M 1.4 or 2.2x
32K or more memory
8080, 8085, or Z-80 CPU

A recent survey of small CP/M machines listed 160 different disk formats, no two of them compatible. The same article mentioned that a new machine enters the market every week. The CP/M portion of that market alone has more formats than anyone can track.

This flood of machinery has created a big problem: file transfers between machines with incompatible disk formats. There are some programs available which move data between computers, but they require you to have a copy on both machines. More importantly, they require custom versions for every different computer.

This is why **The File Transporter** was developed. It will send files between almost any two CP/M machines and you only need one copy! It will even send itself. It doesn't need to be installed, nor does it require special equipment. Almost any matching serial ports, such as standard RS-232, or some parallel ports, will do. It will work with or without modems. It will work on any 7 or 8 bit serial port machine. Most importantly, it can send any kind of file-.COM, .INT, or what have you.

The File Transporter comes with a forty-page manual written by Dr. Jerry Pournelle, noted author and columnist in *BYTE* magazine, about the complexities of file transfers. The manual is comprehensive and educational enough to be useful on its own.

The File Transporter can now send through either the CP/M "PUN:" or "LST:" device. This is an improvement over the old version, which could only send through the punch.

The licensing agreement allows the purchaser to make as many copies of **The File Transporter** as he likes, so long as they stay in his control. It does NOT allow him to sell or give the product away to friends.

We are continually using this program and have found it incredibly valuable for moving data between machines; Workman & Associates is pleased to offer this quality program to our customers.

Workman and Associates Spring 1984 Catalog 2

The Pascal Primer: A Primer On Pascal for CP/M Systems

Requirements: Dual disk drives
CP/M 2.2x
48K or more memory
8080, 8085, or Z-80 CPU

Features: Program sources included on disk
Guide to implementing the included working programs
21-page error correction section by Alex Pournelle
The manual can be purchased separately

Learning a new computer language can be difficult. **Pascal** is no exception; this package makes it easier. **The Pascal Primer** is by Alexander Pournelle, with comments by Dr. Jerry Pournelle. The primer implements the illustrative programs given in the books:

Software Tools In Pascal (Addison-Wesley, 1981)

Brian W. Kernighan and P.J. Plauger

and

Programming In Pascal (Addison-Wesley, 1980)

Peter Grogono

It's for use with either Sorcim's Pascal/M or Digital Research's Pascal/MT+. We furnish the Pascal source code so that the illustrative programs from these two books will run on CP/M systems. This is often a non-trivial task.

The two books are very good for learning Pascal, but they were not written with CP/M in mind. Making the illustrative programs work requires considerable familiarity with both Pascal and CP/M. The Pascal Primer was developed to shortcut this process so that you can begin to run programs (and learn Pascal) immediately.

Workman & Associates can provide the mentioned books for \$25.00 each.

We can also provide the Pascal/M and Pascal MT+ compilers, although many discount houses sell these compilers for less. Our price for the total Pascal Primer package, including the disk, BOTH books, and Pascal Compiler, is:

Pascal/M 8" CP/M \$400.00
Pascal/MT+ 8" CP/M \$500.00

For other compilers or formats, please call.

Business Programs

The Pournelle Accounting Package

Requirements: Dual disk drives

CP/M 1.4 or 2.2x

48K of memory minimum

Your printer must make the vertical bar (|)

Features: Comes with CBASIC source files, executable versions, instructions, and the textbook: Accounting for Non-Accountants by John N. Myer.

This is a fine package for use in your home or small business. It was written by Dr. Jerry Pournelle, the well-known Byte columnist, who uses it for all of his own accounting. It comes with Myer's book, Accounting for Non-Accountants, second edition, which is an excellent introductory textbook. Our customers have said that Dr. Pournelle's manual and this book have taught them enough to be able to keep their own books.

This package includes a number of programs which together allow easy construction of journals and ledgers as described in standard university accounting courses. Sources of most of these programs are provided. The programs are written in CBASIC and compiled in both CBASIC2 and CB-80. (CB-80 is Digital Research's "true compiler" for CBASIC.)

The package has programs for constructing a standard chart of accounts, using the chart, placing the entries into a general journal, and posting the journal into a general ledger, and printing both journal and ledger.

These programs will print out in a standard accounting format as illustrated in textbooks. Thus, your books will "look like books" to both accountants and auditors. We know of no other accounting programs which generate printed books in completely standard format.

Audit trails, including kind of transaction (up to 63 checking accounts, savings accounts, cash, credit cards, or special); check number; date; and explanatory remarks are preserved. Ledger pages have reference numbers to page and item of journal entry. The journal has extensive error checking to find out of balance entries.

This package is not strong on accounts receivable and payable, and has no provision for "aging" accounts and the like. It does, however, create standard ASCII files which can be modified to become entries to other accounting programs. The journal and general ledger features are the best we know of on micro-computers.

These programs can also be used to keep books for hundreds of different companies, each with its own chart of accounts. The emphasis is on user convenience for people who do not (and do not want to) understand the technicalities of accounting.

The Accounting Package contains provisions for FAMILY ACCOUNTS, where non-business items are purchased from business checking accounts, or, when business expenses have been paid from family accounts. No determination of which accounts to "credit" and "debit" is necessary. No extensive accounting knowledge is needed when you use these features.

The Accounting Package has been described in detail by Dr. Pournelle in his "User's Column" in Byte Magazine, May 1982 issue.

We are confident that the most discriminating user will be pleased with the practicality of this product.

Minimum Database

Requirements: Single disk drive

CP/M 1.4 or 2.2x

32K of memory, minimum

CBASIC2 is required for CP/M 1.4

Features: The 32 page manual may be purchased separately
All program sources are included on disk

This program evolved from the "People's Data Base" by Gupta and others. It has been completely rewritten and contains almost no code from the original concept source. The program has evolved from users' suggestions and contains features conceived and designed by those who use it daily.

This program is furnished compiled in Digital Research CB-80 as well as in CBASIC2; all source code is furnished. No compiler is needed to run The Minimum Database, only to change it. The compiled programs run extremely fast. It is suprisingly fast when run under CBASIC2 with most CP/M machines.

The MDB is, in essence, a "do-all" program, which can be used to keep almost any kind of records. It is not intended as a substitute for or rival for more elaborate programs like dBASE-II and is not recommended for extensive financial data files. MDB is best used when the number of items do not exceed 200 and the number of fields does not exceed ten character and ten numeric fields. It emphasizes ease of use and versatility. MDB has been used to keep:

Business Mailing lists (coded)

Club Mailings and Telephone Numbers

Meal Plans for Households

Christmas Card Lists

Note that many of the above are often combined in one file. The program allows you to create a database tailored for specific applications. The "structure" of the base can later be changed if that is desired.

Commands include: DISKIN; OUT; CHOP; (make a file of non-deleted items) DELETE; RESTORE; LIST; MAIL LABELS; FIND; AVERAGES; SORT; and STATISTICS (includes sums, differences, averages correlations, standard deviations). You can SORT your file alphabetically or numerically on ANY field you choose. Hence you can sort mailing lists numerically by Zip code for the Post Office and re-sort alphabetically for your own convenience.

The SORT algorithm is Shell-Mizner. It will work in either ascending or descending order. SORT, as with any other sub-program, can be lifted out and used in your own programs. All program sources are provided.

Many customers find that the Minimum Database is, next to their text editor, the most useful program they own. It comes with a complete manual on program use.

The Software Anthology Series

Requirements: One or more disk drives

CP/M 1.4 or 2.2x

8080, 8085, or Z-80 CPU

Minimum of 48K Memory

Utility Disk 4 requires minimum of 52K

Features: Ask for the free file description pages

CP/M is not an easy thing to use. The beginner especially can have real problems using the "bare bones" system that he begins with. Hence The Software Anthology Series.

The Anthology Series is full of programs to help the CP/M user accomplish what he wants without having to write his own programs. Some of the utilities offered here are public domain, others are not. The disks are offered here to make computing easier for the user. Please note that some of the programs available here can be purchased elsewhere for a lot more money. They aren't any better, they just cost more.

Workman & Associates spends a lot of time going over public domain utilities and writing our own, testing them and writing or rewriting the instructions so that the beginner is able to follow them in most cases. Credit is given when the author is known. Many of the programs came from the CP/M Users Group. CPMUG charges \$15.00/Disk and they have over 80 disks available. We have filtered out what we think are the best and most useful and offer them here at considerable savings to the purchaser.

Utility Disk One contains the best currently available copy programs; filters to format test for different word processing programs; /.com, also sold as DO.COM, a command-stacking program selling elsewhere alone for \$29.00. Included is Ward Christensen's Disk Catalogue Program to help you track your disks and files; D.COM, plus extensive instructions for these and 20 other useful programs. Note: this disk is intended for use under CP/M 1.4 and 2.2x. Not all programs will run on all machines. There is enough on this disk to make it a real bargain.

Utility Disk Two contains more technical programs: Disassemblers, tutorials on disassembly listing programs, etc. ZESOURCE, the Z80 disassembler, is here. This is the most specialized of the series.

Utility Disk Three includes XD.COM, the best extended directory program we've ever used. Included is the source code for the XD.COM found on disk 1. Also included is DUU.COM, the crashed disk recovery program, and over a dozen more utilities.

Utility Disk Four has over a dozen of the finest utilities yet found. BADCHECK.COM, included, checks disks for bad sectors and locks out any found. It alone is advertised again and again for over \$75.00! It is an absolute must for hard disk owners. Also included is SWEEP, an easy-to-use file mover; MORE, a utility like TYPE, but which types the text by screens. Two versions of LINK.ASM, Modem programs by the author of M.I.T.E., are on the disk, along with more filter programs for changing one word processor text to another.

All programs come with extensive documentation and instructions.

Help! is for when you know a command but just can't remember it. Don't open a manual, use the HELP! disk. It's full of computerized reminders of the ins and outs of CP/M, PASCAL-MT+, BDS C, CBASIC, MBASIC, ASM.COM and even FORTRAN. Just type HELP! and the name of the subject you forgot about. HELP! is very fast and works on all CP/M machines. You can even write your own HELP! files or add to existing ones. HELP! is available elsewhere for \$95.00; see our prices for a nice surprise.

Programs For Other Operating Systems

The GSPL Compiler for the FLEX Operating System

Requires: FLEX and FLEX format disk drive
48K or more memory
Advanced C and Pascal knowledge

Features: The manual may be purchased separately
It works well on the TRS-80 color computer
with the FLEX modification installed

Combining many features of Pascal and C, the G System Programming Language is a tool for advanced FLEX programmers. It was written by Eric Wilner, who got tired of not having a quality language on FLEX.

GSPL allows great flexibility with low overhead; it generates fast 6809 code, makes system calls, etc.. It has no type checking, though it allows enumerated types, expressions in CASE statement selectors, string and character literals, plus other advanced features. It comes with a manual that illustrates how code is generated, shows the features of the language, and shows examples of actual GSPL code. GSPL is not designed for the beginner. It allows great flexibility and freedom but preforms few checks. For FLEX programmers, though, no better development tool currently exists.

GSPL also comes with a text formatter, font editor, and editor. The formatter works on the Epson MX-80 and MX-100 printers.

BDS's C by Leor Zolman

Requires: At least 48K memory
8080, 8085, or Z-80 CPU
CP/M 2.2 only

Features: The CDB debugger by David Kirkland is included.
The BDS C manual can be purchased separately.

Developed in the early 1970's by Kernighan and Ritchie at Bell Laboratories, C was designed for "systems programming" but has become increasingly popular for applications programming. As an integral part of UNIX, C is a concise language, using most of the ASCII characters as symbols. Programs written in C can be moved to a wide variety of systems with very little trouble or modification.

Leor Zolman's BDS C compiler is a subset of the full C language. It generates very compact 8080 code. The compiler itself runs very quickly and is suitable for CP/M applications program development. There is support for BIOS and BDOS calls. If you want to learn C and not spend much, this is for you.

BDS C was reviewed in the August 1983 C language issue of Byte. The manual, though complete, is not designed to teach you C. For this we recommend "The C Programming Language" (\$25.00).

The supplied debugger was written especially to work with BDS C version 1.5a. It's a powerful tool, good for finding subtle bugs in programs. Other supplied programs include a public-domain modem program, real number support, etc..

Games

Adventure

Requires: CP/M 2.2; 48K or more memory
8080, 8085, or Z80 CPU

This is the original Crowther and Wood Adventure in the Collosal Cave. The Workman & Associates version was reviewed in the November 1980 issue of Byte magazine. Our version is very fast. This is the original game with Green Snake, Pirate, two mazes, Giant Clam (I see no Clam here), Troll, and all the other features you've heard about.

If your associates keep saying things like "I see no food here", perhaps you need Adventure so that you can understand what they're talking about...

Build An Adventure

Requires: CP/M 2.2 or later; 48K or more memory
8080, Z80, or 8085 CPU

Only with Build an Adventure can you truly build your own adventure!

Our kit contains the original Adventure and its database, and full instructions on how to alter the game, add rooms, objects, help, or even slightly modify the original game to confuse your friends.

Adventure is written in machine language and 30-40% of the game is "hard coded". The rest of the game, including the vocabulary, travel table, room descriptions, objects, etc., can be changed by modifying the database. Our kit allows you to alter any of these features, as well as use the hard-coded features to make a completely different game.

With our kit you can build an adventure in space and time with no feature in common with the Collosal Cave!

We also furnish the complete original travel table (map) of Adventure! Does the maze have you buffaloeed? Are you unable to get into the Dark Room? With our kit, you not only have the complete map, you can also learn how to move at will throughout the Collosal Cave by magic! You can even get yourself killed at any time! Astound your friends. Invent new adventures. Be a Master Magician.

Get your Build an Adventure kit today, and be the first one on your block to invent a game that no one can solve.

Star Trek

Requires: CP/M 2.2
48K or more memory
8080, 8085, or Z-80 CPU

The original public domain game altered and tightened to the point of excellence. Face invisible Klingons, discover your only starbase is surrounded by Romulans, get trapped by the Tholians. Dr. Jerry Pournelle modified the original game and we happily offer his implementation of this all-time favorite computer game here.

This game was rewritten in Digital Research's CB-80 basic. It runs very quickly on any CP/M computer. It's not a "killer" implementation; it should be fun for anyone who likes interstellar combat at home.

IBM PC Programs

Magic Keyboard
From Jim Baen Inc.

Requires: PC-DOS 1.0 or later; 64K or more memory
IBM PC or PC/XT; one single-sided 5-1/4" drive
BASIC is required for customization only

Features: assigns any key on the IBM keyboard except the control key to make any other character

The IBM PC is a pretty good computer. Those three letters, IBM, have a lot to do with its sales figures, but the machine itself is pretty versatile. It, however, has several major drawbacks, not the least of which is its keyboard.

IBM invented the "standard" keyboard, that of the Selectric. Yet they farmed out production of the PC's keyboard design and are now stuck with a keyboard unlike their best.

The Magic Keyboard circumvents many of the PC's keyboard deficiencies. For instance, the "/" key can be turned into another shift key. Keys can be changed to make almost anything. Best of all, the original key meaning (for instance, the "/" key) can be sent by pressing the "ALT" key.

The Magic Keyboard comes with five example files and instructions. Two versions of the program itself come on the disk; one is for the older model PCs; the other for PC-XTs and new PCs. The Magic Keyboard can be run automatically whenever you start up your PC by placing it in your "AUTOEXEC.BAT" file.

WRITE:

Writer's Really Incredible Text Editor
From Proteus Engineering

Requires: CP/M 1.4 or 2.2; 32K or more memory
One or more disk drives

Features: Supports many terminals and printers (see below)
The manual may be purchased separately

Perhaps you've heard of this program through Jerry Pournelle's column in Byte; perhaps you are just dissatisfied with your current word processing program. Whatever your reason, if you want a word processing program designed to work reliably, quickly, and easily, WRITE is for you.

Why WRITE Here are the reasons we prefer it to anything else on the market:

-- It's easy to learn and use. There are only 32 editing commands to learn, each a single keystroke long. The manual was written with an eye to both beginner and expert processors of words. There is a 15-page section written by Bjo Trimble for newcomers to computers.

Terminals and computers supported by WRITE

Lear Siegler ADM-3A	Beehive DM-5 series	Datamedia 1521
Freedom 100	Hazeltine 1400 and 1500 series	
ANSI X3.64 compatible:	MIME-740, Ambassador, etc.	
DEC VT-100	DEC VT-180 Robin	
Lear Siegler ADM-3A, 22, and ADM-31		
Morrow MDT-20	Lear Siegler ADM-32/ADM-42	
Micro-term ACT-IV	Micro-term ACT-V	Soroc IQ 120/130
Qume QVT-102	TEC 570/571	Visual 50/55
Visual 200	Wise 100	Osborne I
Zenith Z-19 / Z-29	Zenith Z-100 series (CP/M-85 and 86)	
Televideo 910	Televideo 912 / 920	
Televideo 925	Televideo 950	
Epic 14E	ADDS Viewpoint	Ampex Dialogue-80
ADDS Regent 20 / 25	Cromemco 3102	Otrona Attache
Challenge CS-1000 Computer		Epson QX-10
KayPro 2/4	KayPro 10	Lobo MAX-80

Printers supported by WRITE

Diablo 620/630	Diablo 1610/1620	C. Itoh F-10
"Diablo-compatible" printers such as Juki		
Anadex DP-9000	DECwriter III	Epson MX-80
Epson FX-80	Epson MX-100	IDS-440 Paper Tiger
MPI Printmate 99	MPI 150G & Sprinter	
Okidata Microline 82/83	Okidata Microline 84	
Qume Sprint 3/5/9/11	Sellum I (NEC 5500D)	
NEC 3510, 5510/5520, 5515/5525, 7710/7720, and 7715/7725		
C. Itoh 8510A and the many equivalent printers		
Datasouth DS-180	Malibu M-200	NEC PC-8023A
Teletype driver (works with almost any printer)		

Disk Formats Supported By W&A

List A formats are available at the list price. Because of the extra disks required for B format disks, we must charge \$7 more per product. If you don't see your disk format listed, please call us and inquire.

Format A List -- standard list price per product

8" standard CP/M disks (3740/1) Epson QX-10 CP/M & TP/M Otrona Attache
 KayPro IV and Ten (can be read by Robbie) Morrow MicroDecision II and III
 Zenith Z-100/Heath H-100 All TeleVideo CP/M Hewlett-Packard HP-125
 IMS-5000 Datavue Magic Computer NEC PC-8801a CP/M Sanyo CP/M

Format B List -- standard price plus \$7 per product

Osborne I SD and DD (specify which) Xerox 820 5 1/4" SD and DD KayPro II
 TRS-80 Model I w/ Omikron CP/M TRS-80 III w/ Memory Merchant CP/M SSDD
 Morrow MO-I SSDD Heath/Zenith Z-90 soft sector SS NEC PC-8001a
 Heath/Zenith w/ Magnolia Access Matrix (Actrix) SuperBrain & Jr.
 Cromemco w/ Intl. Terminals CP/M (SS; DS is Format A price) Cromemco CROS
 DEC VT-180 (Robin) Apple CP/M (no WRITE yet; ask) Lobo MAX-80 5 1/4"
 TI Professional w/ CP/M-80 Others being added

Please specify exact machine name and model. KEY: SS means single-sided, DS means double-sided disks; SD, single density; DD, double density.
 IBM PC disks come single-sided, PC-DOS 1.0 formatted (compatible with all IBM machines including the PCjr.)

WRITE	\$239.00.
Manual Only	\$ 25.00
THE PASCAL PRIMER	\$ 64.50
Manual only	\$ 10.00*
Books	
Software Tools in Pascal	\$ 22.00
Programming in Pascal	\$ 22.00
THE SOFTWARE ANTHOLOGY SERIES	
Utility disk 1	\$ 32.50
Utility Disk 2	\$ 32.50
Utility Disk 3	\$ 32.50
utility Disk 4	\$ 32.50
HELP!	\$ 32.50
THE POURNELLE ACCOUNTING PACKAGE	\$245.00
Manual Only	\$ 15.00*
THE MINIMUM DATABASE	\$ 49.50
Manual Only	\$ 10.00*
THE BDS C COMPILER	\$135.00
Manual Only	\$ 25.00*
Books	
The C Programming Language	\$ 20.00
THE ADVENTURE GAME	\$ 19.50
THE BUILD AN ADVENTURE GAME	\$ 89.50
STARTREK	\$ 19.50
THE GSPL COMPILER	\$ 70.00
(FLEX Format ONLY)	

* toward future purchase of program

Date _____ Phone _____
Name _____
Address _____
City _____ State _____ ZIP _____

Send order to:
Workman & Associates
112 Marlon Avenue
Pasadena, CA 91106
(213) 796-4401

Note: Unless otherwise specified, all programs will be shipped on 8" Single Sided Single Density Disks

Format	Description	Unit Price

Prices subject to change without notice.

Shipping 2.50
TOTAL

CPM is a trademark of Digital Research.
Pascal MT+ is a trademark of Digital Research.
Pascal/M is a trademark of SORCIM.

Date _____ Phone _____
Name _____
Address _____
City _____ State _____ ZIP _____

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